

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
48 49 50 51 52

chain bonds :

11-52 19-49 39-50 46-51

ring bonds:

10 4, 4, -40
exact/norm bonds :

1-52 5-49 16-52 18-51 25-50 37-49 32-51 34-50

exact bonds :

11-52 19-49 39-50 46-51

11-32 19-49
normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15
 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24 25-26 25-30 26-27 27-28
 28-29 29-30 31-32 31-36 32-33 33-34 34-35 35-36 37-38 37-42 38-39 39-40 40-41
 41-42 43-44 43-48 44-45 45-46 46-47 47-48

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom
32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom
42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:Atom 49:Atom 50:Atom 51:Atom
52:Atom

L5 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:755107 CAPLUS
 DOCUMENT NUMBER: 137:272563
 TITLE: Colorimetric and **fluorimetric** analysis of carbohydrates
 INVENTOR(S): Strongin, Robert M.; Cabell, Larry Allen; St. Luce, Nadia; Lewis, Patrick T.; He, Ming; Escobedo Cordova, Jorge O.; Davis, Claude Joseph
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 16 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| US 2002142475 | A1 | 20021003 | US 2001-778158 | 20010205 <-- |
| US 6534316 | B2 | 20030318 | | |

PRIORITY APPLN. INFO.: US 2001-778158 20010205
 OTHER SOURCE(S): MARPAT 137:272563

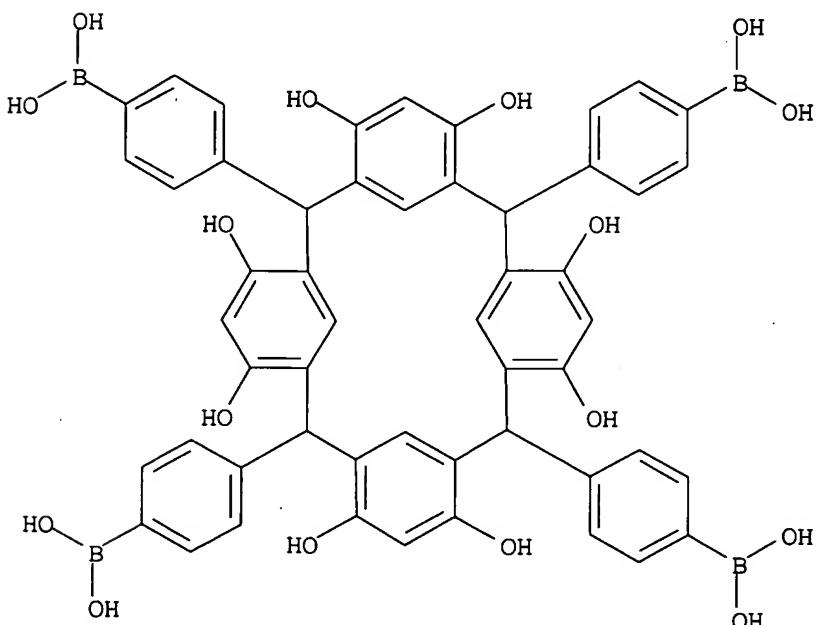
AB Methods are disclosed for the simple, rapid, and selective colorimetric detection of carbohydrates, including fructose, glucose, sialic acid, and oligosaccharides. There is no need for any prior hydrolysis or other chemical modification of the analytes. Resorcinarenes, xanthene dyes, and related compds., formally produced by the reaction of 2 equiv of resorcinol and a suitable electrophilic condensation partner, are used as chromophores or **fluorophores** for the detection of sugars and other carbohydrates.

IT 194935-23-4 195008-64-1

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (colorimetric and **fluorimetric** anal. of carbohydrates)

RN 194935-23-4 CAPLUS

CN Boronic acid, [(4,6,10,12,16,18,22,24-octahydroxypentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-2,8,14,20-tetrayl)tetra-4,1-phenylene]tetrakis-, stereoisomer (9CI) (CA INDEX NAME)



L5 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:428850 CAPLUS
 DOCUMENT NUMBER: 137:6006
 TITLE: Preparation of Calixarenes as Anti-viral compounds
 INVENTOR(S): Harris, Stephen J.
 PATENT ASSIGNEE(S): Aids Care Pharma Limited, Ire.
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|--------------|
| WO 2002044121 | A1 | 20020606 | WO 2001-IE150 | 20011130 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2002020992 | A5 | 20020611 | AU 2002-20992 | 20011130 <-- |
| EP 1345884 | A1 | 20030924 | EP 2001-998526 | 20011130 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRIORITY APPLN. INFO.: | | | IE 2000-983 | A 20001201 |
| | | | WO 2001-IE150 | W 20011130 |
| OTHER SOURCE(S): GI | CASREACT 137:6006; MARPAT 137:6006 | | | |

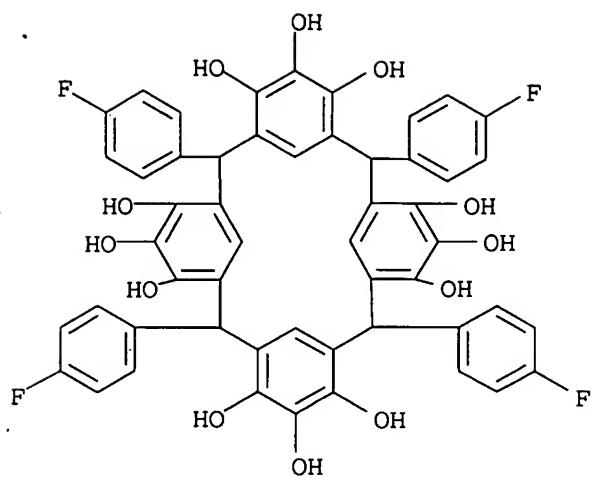
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = OCH₂CO₂K, OCH₂CO₂H or OCH₂CONH₂; R2 = R1 or NO₂; R3 = H, 2-HO₂CCH₂OC₆H₄, or 4-XC₆H₄ where X = **halo** (preferably F or Br); R4 = H or **halo** (preferably Br)] are prepared and disclosed as antiviral agents. Thus, II was prepared in four steps via cyclocondensation **4-fluorobenzaldehyde** with pyrogallol and subsequent bromination, O-alkylation with Et bromoacetate and hydrolysis with KOH. II possessed a therapeutic index (TC₅₀/EC₅₀ μ m) of 4,000. I were found to have an additive effect when administered with AZT, and therefore, the compds. are useful as pharmaceutical compns. in the treatment of AIDS.

IT 433334-86-2P 433334-87-3P 433334-88-4P
 433334-89-5P 433334-90-8P 433334-94-2P
 433334-95-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediates; preparation and antiviral activity of calixarenes as anti-AIDS agents)

RN 433334-86-2 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,5,6,10,11,12,16,17,18,22,23,24-dodecol, 2,8,14,20-tetrakis(4-fluorophenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999-722687 CAPLUS

DOCUMENT NUMBER: 131:318951

TITLE: Controlled-release microbical compositions

INVENTOR(S): Ghosh, Tirthankar

PATENT ASSIGNEE(S): Rohm and Haas Company, USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 954965 | A1 | 19991110 | EP 1999-303343 | 19990428 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AU 9923924 | A1 | 19991111 | AU 1999-23924 | 19990422 <-- |
| SG 72947 | A1 | 20000523 | SG 1999-1981 | 19990429 <-- |
| NO 9902098 | A | 19991108 | NO 1999-2098 | 19990430 <-- |
| CN 1234178 | A | 19991110 | CN 1999-105298 | 19990430 <-- |
| BR 9901414 | A | 20010313 | BR 1999-1414 | 19990504 <-- |
| JP 2000001403 | A2 | 20000107 | JP 1999-125926 | 19990506 <-- |
| PRIORITY APPLN. INFO.: | | | US 1998-84221P | P 19980505 |

OTHER SOURCE(S): MARPAT 131:318951

AB Thus title compns. comprise a microbicide, such as an isothiazolone derivative and a calixarene compound. Applications include microbiol. control in cooling towers, air washers, mineral slurries, paper manufacture, adhesives, caulks, mastics, sealants, cosmetics, leather, wood, plastics, etc., as well as use as marine antifouling compns.

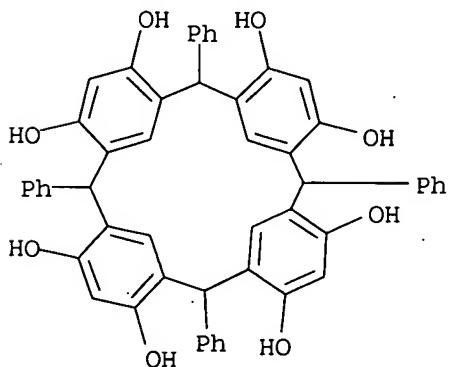
IT 129831-85-2

RL: MOA (Modifier or additive use); USES (Uses)

(formulation ingredient in controlled-release microbical compositions.)

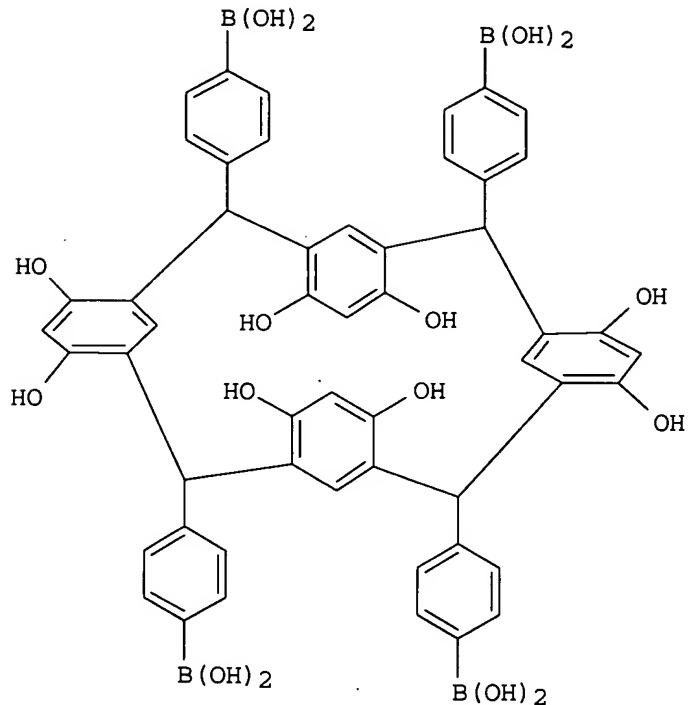
RN 129831-85-2 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1,5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetraphenyl- (9CI) (CA INDEX NAME)



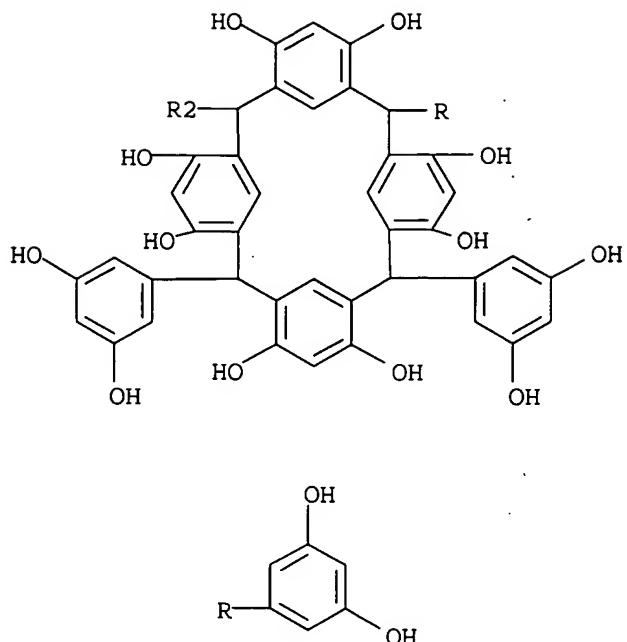
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:407878 CAPLUS
DOCUMENT NUMBER: 131:110650
TITLE: Simple and rapid visual sensing of saccharides
AUTHOR(S): Davis, Claude J.; Lewis, Patrick T.; McCarroll,
Matthew E.; Read, Mark W.; Cueto, Rafael; Strongin,
Robert M.
CORPORATE SOURCE: Department of Chemistry, Louisiana State University,
Baton Rouge, LA, 70803, USA
SOURCE: Organic Letters (1999), 1(2), 331-334
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



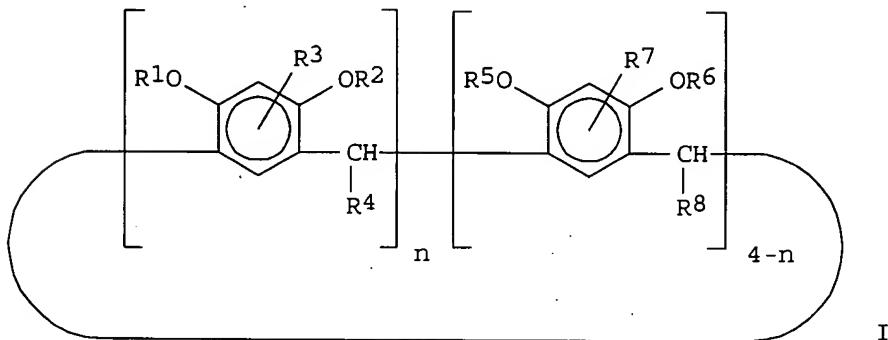
L5 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:407066 CAPLUS
DOCUMENT NUMBER: 131:88297
TITLE: Benzyl ether dendrimers and their intermediate calix[4]resorcinarene for manufacture of dendritic polymers
INVENTOR(S): Yamakawa, Yoshitaka; Ueda, Mitsuru; Asai, Michihiko; Takeuchi, Kazuhiko; Nagahata, Ritsuko
PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan; Zaidan Hojin Kagaku Gijutsu Senryakusuishin Kiko
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|--------------|
| JP 11171812 | A2 | 19990629 | JP 1997-356303 | 19971209 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1997-356303 | 19971209 |
| OTHER SOURCE(S): | MARPAT 131:88297 | | | |
| GI | For diagram(s), see printed CA Issue. | | | |
| AB | The dendrimers I [R = (substituted) benzyloxy; R1 = H, (substituted) benzyloxy; R2-R4 = H, OH, halo , alkyl, aryl, aralkyl, alkaryl, alkoxy, alkenyl(oxy), acyl(oxy), alkoxy carbonyl, cyano, NO ₂ , (substituted) benzyloxy; ≥ 1 of R2-R4 = (substituted) benzyloxy] and their intermediate I (R = R2 = R4 = OH, R1 = R3 = H) (II) are claimed. Thus, resorcinol was condensed with 3,5-dihydroxybenzaldehyde to give 48% II, which was benzylated by 3,5-diallyloxybenzyl bromide (III) in Me ₂ CO in the presence of 18-crown-6 ether and K ₂ CO ₃ under reflux for 48 h to give 79% I [R = R2 = R4 = CH ₂ C ₆ H ₃ (OCH ₂ CH ₂) ₂ -3,5, R1 = R3 = H]. The allyloxy group-containing dendrimer was deallylated and further benzylated with III. | | | |
| IT | 220803-32-7P 229492-15-3P | | | |
| | RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of calix[4]resorcinarene benzyl ether dendrimers) | | | |
| RN | 220803-32-7 CAPLUS | | | |
| CN | Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetrakis(3,5-dihydroxyphenyl)- (9CI) (CA INDEX NAME) | | | |



L5 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:394118 CAPLUS.
 DOCUMENT NUMBER: 129:128942
 TITLE: Toner for electrostatic latent image development
 INVENTOR(S): Ueda, Hideaki; Furukawa, Keiichi
 PATENT ASSIGNEE(S): Minolta Camera Co., Ltd., Peop. Rep. China
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| JP 10161349 | A2 | 19980619 | JP 1996-316063 | 19961127 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1996-316063 | 19961127 |
| GI | | | | |



AB The title toner contains a resorcinol arene derivative I (R1, R2, R5, R6 = H, C1-5 alkyl, $(CH_2)_mCO_2R_9$; R9 = H, lower alkyl; m= 1-3; R1, R2, R5, and R6 cannot be H in the same time; R3, R7 = H, halo, alkoxy, carboxylnitro, alkyl, hydroxy; R4, R8 = alkyl, aryl, heterocyclyl; n = 1-4) as a charge controlling agent. The toner shows superior charge stability, resistance to heat and solvent, color reproducibilit

L5 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:80955 CAPLUS
DOCUMENT NUMBER: 128:197037
TITLE: Solubilization of organic compounds by
calix[4]resorcinarenes bearing four hydrophobic chains
AUTHOR(S): Koide, Yoshifumi; Li, Bo; Kawaguchi, Yuichi; Shosenji,
Hideto; Esumi, Kunio
CORPORATE SOURCE: Dep. Appl. Chem., Fac. Eng., Kumamoto Univ., Kumamoto,
860, Japan
SOURCE: Nihon Yukagakkaishi (1998), 47(1), 57-63
CODEN: NIYUFC; ISSN: 1341-8327
PUBLISHER: Nihon Yukagaku Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

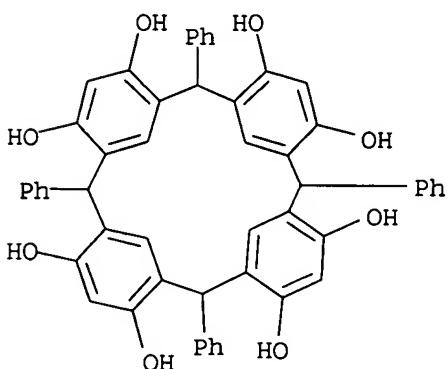
AB Calix[4]resorcinarenes each bearing four hydrophobic side chains ([4]Ar-Rn: tetraalkyl side chains [4]Ar-Ph: tetra-Ph side chains, and [4]Ar-N: tetranaphthyl side chains) were examined as solubilizing agents. [4]Ar-Rn, [4]Ar-Ph, and [4]Ar-N showed stable orientation at the surface or interface and high solubilization capacity was also noted for organic compds. such as hexyl alc., benzene, and toluene. Solubilization capacity was high near cmc, and aromatic compound solubility decreased in proportion to compound mol. size. [4]Ar-R6 bearing tetra hexyl chains was the most efficient solubilizer in [4]Ar-Rn, [4]Ar-Ph, and [4]Ar-N ; 11-fold molar hexanol could be dissolved in 2 + 10-3 M [4]Ar-R6. Long-alkyl chain alc. was highly solubilized with [4]Ar-Rn of the same chain length. The high solubilization may be considered due to microemulsion formation based on the orientation of [4]Ar-Rn at the compound-H2O interface. Dyes could also be dissolved in [4]Ar-Rn solution by inclusion.

IT 129831-85-2 203714-15-2

RL: PEP (Physical, engineering or chemical process); PROC (Process)
(solubilization of organic compds. by calix[4]resorcinarenes bearing four hydrophobic chains)

RN 129831-85-2 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1
5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,
2,8,14,20-tetraphenyl- (9CI) (CA INDEX NAME)



LS ANSWER 14 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:994163 CAPLUS
 DOCUMENT NUMBER: 124:55584
 TITLE: Preparation of calixarene-based compounds having
 antibacterial, antifungal, anticancer, and anti-HIV
 activity
 INVENTOR(S): Harris, Stephen J.
 PATENT ASSIGNEE(S): Ire.
 SOURCE: PCT Int. Appl., 148 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|--------------|
| WO 9519974 | A2 | 19950727 | WO 1995-IE8 | 19950124 <-- |
| WO 9519974 | A3 | 19950921 | | |
| | W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, FI, GB, HU, JP, KP, LU, NO, RO, UA, US RW: AT, BE, CH, DE, ES, FR, GB, GR, IE, LU, NL, SE, GA, ML, NE, SN, TD, TG | | | |
| AU 9515453 | A1 | 19950808 | AU 1995-15453 | 19950124 <-- |
| PRIORITY APPLN. INFO.: | | | IE 1994-57 ; | A 19940124 |
| | | | WO 1995-IE8 | A 19950124 |

OTHER SOURCE(S): MARPAT 124:55584

GI For diagram(s), see printed CA Issue.

AB Calixarene-based compds., which are calixarenes or oxacalixarenes, acyclic phenyl-formaldehyde oligomers, cyclotrimeratrylene derivs., cyclic tetrameric resorcinol-aldehyde derivs. known as Hogberg compds. and cyclic tetrameric pyrogallol-aldehyde derivs., are prepared. For example, calixarenes or oxacalixarenes are represented by general formula [I; n + m = 3-8; m = 0-3; n = 0-8; R1 = H, halo, hydrocarbyl, aryl, (un)substituted hydrocarbylaryl, NO2, SO3M1; wherein M1 = alkali metal, SO3H; R1 = OR2; wherein R2 = CH2CO2R3, CH2CO2Mp/p, CH2CONR4R5; wherein R3 = (un)substituted alkyl; M = metal, ammonium ion; p = the charge on the metal ion; R4 or R5 may be the same or different, or both may be part of amino acid ester of poly(amino acid ester) or one or more of the same or different amino acids or part of a cyclic polyene antibiotic/antifungal drug or part of a cyclic nitrogen heterocycle; X = halo, NO2, CO2H, cyano, other electron withdrawing group]. Thus, n-butyraldehyde and pyrogallol in a 1:4 mixture of 37% aqueous HCl and EtOH was refluxed under N

for

90 min to give a cyclic tetramer (II; R = X = H), which was brominated with Br in CHCl3 to II (R = H, X = Br) and etherified with Et bromoacetate in the presence of K2CO3 in refluxing acetone to give II (R = CH2CO2Et, X = Br). The latter compound was saponified with KOH in refluxing EtOH, acidified with aqueous HCl, and treated with 25% aqueous NH4OH to give II (R = CH2CO2-NH4+, X = Br). The latter compound in vitro inhibited the infection of C8166 cells with HIV-2, SIV (Simian immunodeficiency virus), and HIV-1 with EC50 of 10, 20, and 0.03 μ M.

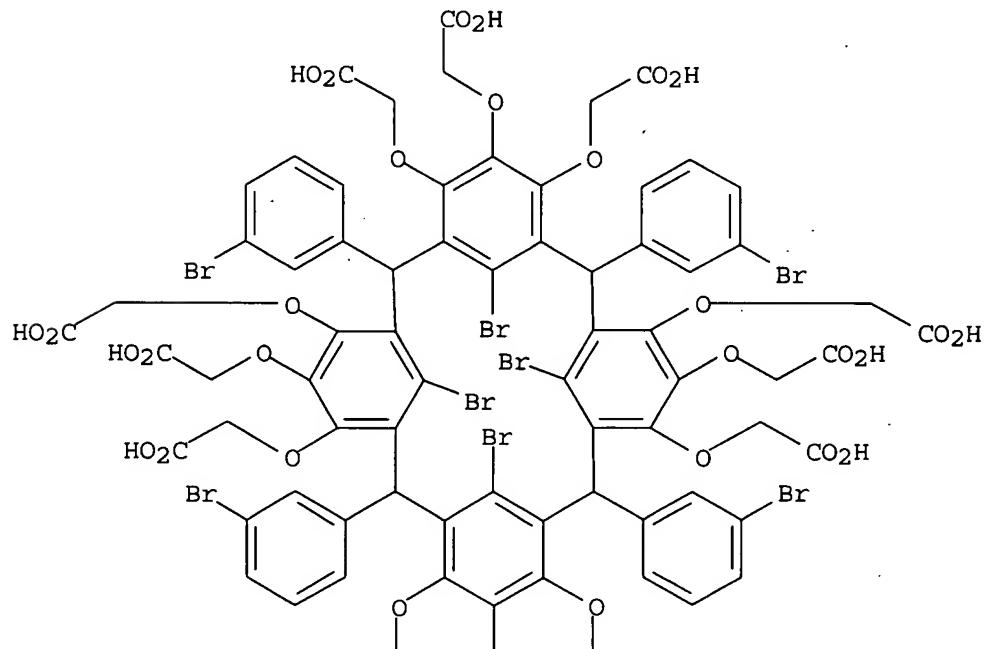
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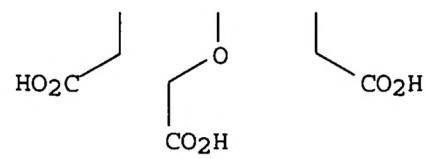
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| 171799-86-3P | 171799-87-4P | 171799-88-5P |
| 171799-89-6P | 171799-90-9P | 171799-91-0P |
| 171799-92-1P | 171799-93-2P | 171799-94-3P |
| 171799-95-4P | 171799-96-5P | 171799-97-6P |
| 171799-98-7P | 171799-99-8P | 171800-00-3P |
| 171800-01-4P | 171800-02-5P | 171800-03-6P |
| 171800-04-7P | 171800-05-8P | 171800-06-9P |
| 171800-07-0P | 171800-08-1P | 171800-09-2P |
| 171800-10-5P | 171800-11-6P | 171800-12-7P |
| 171800-13-8P | 171800-14-9P | 171800-21-8P |
| 171800-26-3P | 171800-67-2P | |

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of calixarene-based compds. having antibacterial, antifungal, anticancer, and anti-HIV activity)

RN 171799-59-0 CAPLUS

PAGE 1-A





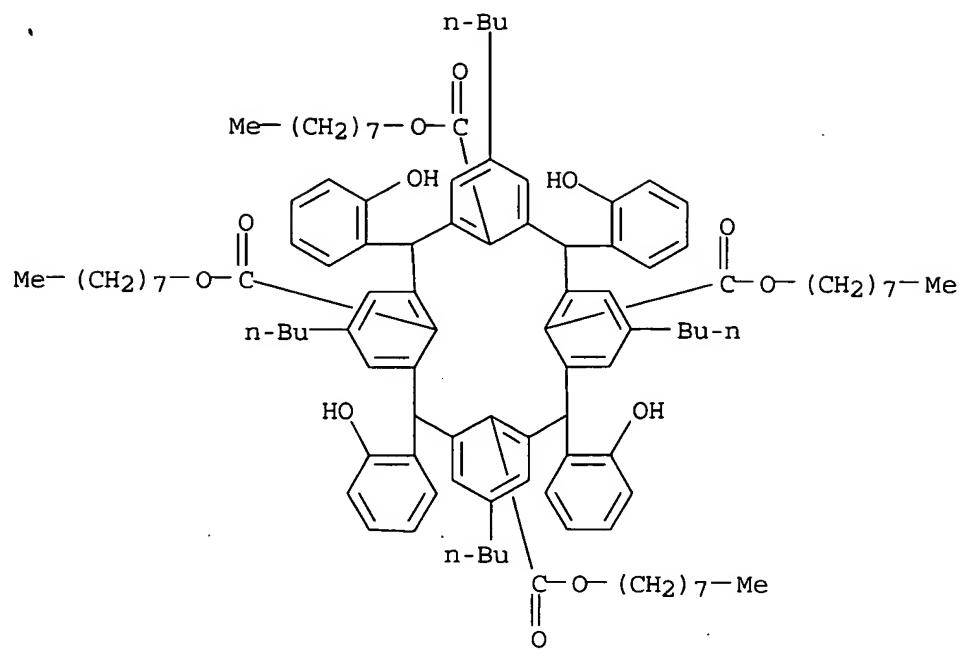
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E5 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:947266 CAPLUS
 DOCUMENT NUMBER: 124:101807
 TITLE: Triboelectric material for positively charging
 electrophotographic toner
 INVENTOR(S): Iwasa, Keiko; Mukushiro, Osamu; Matsura, Juji
 PATENT ASSIGNEE(S): Hodogaya Chemical Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|--------------|
| JP 07234547 | A2 | 19950905 | JP 1994-47924 | 19940223 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1994-47924 | 19940223 |
| OTHER SOURCE(S): | MARPAT 124:101807 | | | |
| GI | For diagram(s), see printed CA Issue. | | | |
| AB | The triboelec. material contains a calixarene derivative I or II (R1 = H, C1-12 alkyl, Ph, acyl, (CH2) _m CO ₂ R ₄ ; R ₂ , R ₇ = H, C1-12 alkyl, OH, C1-8 alkoxy, NH ₂ , C1-8 alkylamino, halo , Ph, NO ₂ , SO ₃ H, C1-8 sulfonyl, CO ₂ H, ester, acyl, Me ₃ Si, nitril; R ₃ , R ₈ = H, C1-12 alkyl, Q, N- or O-containing heterocyclic group; n = 4-8; R ₄ = H, alkyl; m = 1-3; R ₅ = H, C1-8 alkyl, OH, C1-8 alkoxy, halo , NO ₂ , NH ₂ , alkylamino, carbamoyl, CO ₂ H, C1-8 ester, acyl; l = 1-5; R ₆ = H, C1-8 alkyl) as a charge-controlling agent at least on the part of the surface. The material showed good repeating durability. | | | |
| IT | 172464-59-4 | | | |
| | RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) | | | |
| | (triboelec. material containing calixarene charge-controlling agent for pos. charging electrophotog. toner with good repeating durability) | | | |
| RN | 172464-59-4 CAPLUS | | | |
| CN | Pentacyclo[19.3.1.13, 7.19, 13.115, 19]octacosa-1(25), 3, 5, 7(28), 9, 11, 13(27), 15, 17, 19(26), 21, 23-dodecaene-25, 26, 27, 28-tetracarboxylic acid, 5, 11, 17, 23-tetrabutyl-2, 8, 14, 20-tetrakis[4-(ethoxycarbonyl)phenyl]- (9CI) (CA INDEX NAME) | | | |

LS ANSWER 16 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:947265 CAPLUS
 DOCUMENT NUMBER: 124:101806
 TITLE: Electrostatographic developer toner containing calixarene derivative as charge-controlling agent
 INVENTOR(S): Iwasa, Keiko; Mukushiro, Osamu; Matsura, Juji
 PATENT ASSIGNEE(S): Hodogaya Chemical Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|-------------------|-----------------|--------------|
| JP 07234544 | A2 | 19950905 | JP 1994-47923 | 19940223 <-- |
| JP 3313871 | B2 | 20020812 | | |
| PRIORITY APPLN. INFO.: | | | JP 1994-47923 | 19940223 |
| OTHER SOURCE(S): | | MARPAT 124:101806 | | |
| GI | For diagram(s), see printed CA Issue. | | | |
| AB | The toner contains a calixarene derivative I (R1 = H, C1-12 alkyl, OH, C1-8 alkoxy, amino, C1-8 alkylamino, Ph; R2 = C4-12 alkyl, Q; R3 = H, C1-8 alkyl, OH, C1-8 alkoxy, halo, nitro, amino, carbamoyl, alkylamino, carboxy, C1-8 ester, acetyl; m = 1-5) or II (R4 = H, C1-8 alkyl; R5 = H, C1-12 alkyl, Ph, C1-8 alkoxy, amino, C1-8 alkylamino; R6 = H, alkyl, Q). The toner showed good storage stability, and gave low stains. | | | |
| IT | 172464-59-4 172464-60-7 | | | |
| | RL: TEM (Technical or engineered material use); USES (Uses) (electrostatog. developer toner containing calixarene derivative charge-controlling agent) | | | |
| RN | 172464-59-4 CAPLUS | | | |
| CN | Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1,5,17,19(26),21,23-dodecaene-25,26,27,28-tetracarboxylic acid, 5,11,17,23-tetrabutyl-2,8,14,20-tetrakis[4-(ethoxycarbonyl)phenyl]- (9CI) (CA INDEX NAME) | | | |
| *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** | | | | |
| RN | 172464-60-7 CAPLUS | | | |
| CN | Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1,5,17,19(26),21,23-dodecaene-25,26,27,28-tetracarboxylic acid, 5,11,17,23-tetrabutyl-2,8,14,20-tetrakis(2-hydroxyphenyl)-, tetraoctyl ester (9CI) (CA INDEX NAME) | | | |



L5 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:828347 CAPLUS

DOCUMENT NUMBER: 123:241910

TITLE: Friction charge-providing member for positively-chargeable toner.

INVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao; Watanabe, Kayoko; Iwasa, Keiko

PATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| EP 655658 | A2 | 19950531 | EP 1994-105509 | 19940408 <-- |
| EP 655658 | A3 | 19960703 | | |
| R: DE, FR, GB | | | | |
| JP 07128916 | A2 | 19950519 | JP 1993-293798 | 19931101 <-- |
| JP 08262871 | A2 | 19961011 | JP 1994-93926 | 19940408 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1993-293798 | A 19931101 |

OTHER SOURCE(S): MARPAT 123:241910

GI For diagram(s), see printed CA Issue.

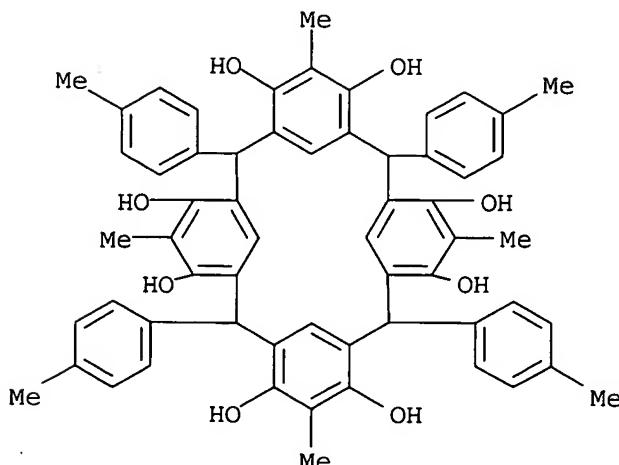
AB A friction charge-providing member for pos.-chargeable toner comprises a parent material and a charge-controlling agent on the surface selected from I and II [A and B = H, halogen, alkoxy, carboxyl, hydroxyl, ester, nitro, amino, alkylamino, alkyl which may contain a substituent(s) or a Ph group which may contain a substituent(s); R = H, alkyl or Ph or naphthyl group which may contain a substituent(s); m = an integer 2 to 16; and n = an integer 4 to 8]. The toner provides improved charging stability.

IT 168405-65-0

RL: TEM (Technical or engineered material use); USES (Uses)
(charge-controlling agent for electrostatog. toner)

RN 168405-65-0 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1,5,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,
5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA
INDEX NAME)



L5 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:794919 CAPLUS
 DOCUMENT NUMBER: 123:325712
 TITLE: Electrostatic image developing toner.
 INVENTOR(S): Mukudai, Osamu; Matsuura, Yuuji; Niimura, Isao;
 Watanabe, Kayoko; Isawa, Keito
 PATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 22 pp
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| EP 651294 | A1 | 19950503 | EP 1994-105508 | 19940408 <-- |
| EP 651294 | B1 | 19980708 | | |
| R: DE, FR, GB | | | | |
| JP 07175269 | A2 | 19950714 | JP 1994-93927 | 19940408 <-- |
| US 5679489 | A | 19971021 | US 1996-620150 | 19960322 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1993-293799 | A 19931101 |
| | | | US 1994-224523 | B1 19940407 |

OTHER SOURCE(S): MARPAT 123:325712

GI For diagram(s), see printed CA Issue.

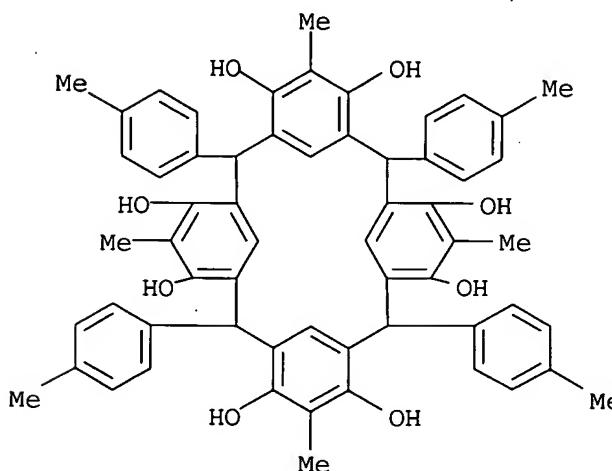
AB An electrophotog. toner free of metal such as Cr comprises ≥ 1 charge-controlling agent selected from I and II [A, B = H, halogen, alkoxy carboxyl, OH, ester, nitro, amino, alkylamino, alkyl, Ph; R = H, alkyl, Ph, naphthyl; m = 2-16; n = 4-8]. The toner shows no deterioration during preparation, excellent stability, excellent dispersibility in binder resin, and excellent friction chargeability.

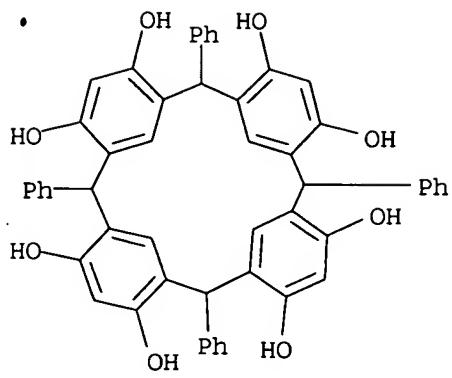
IT 168405-65-0

RL: MOA (Modifier or additive use); USES (Uses)
(charge-controlling agent for electrophotog. toners)

RN 168405-65-0 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol,
5,11,17,23-tetramethyl-2,8,14,20-tetrakis(4-methylphenyl)- (9CI) (CA
INDEX NAME)





L5 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:613749 CAPLUS
 DOCUMENT NUMBER: 117:213749
 TITLE: Epoxy resins based on macrocyclic calixarenes
 INVENTOR(S): Morton, Trevor Charles; Hodgkin, Jonathan Howard; Dao
 Buu Nguyen
 PATENT ASSIGNEE(S): Commonwealth Scientific and Industrial Research
 Organisation, Australia
 SOURCE: PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

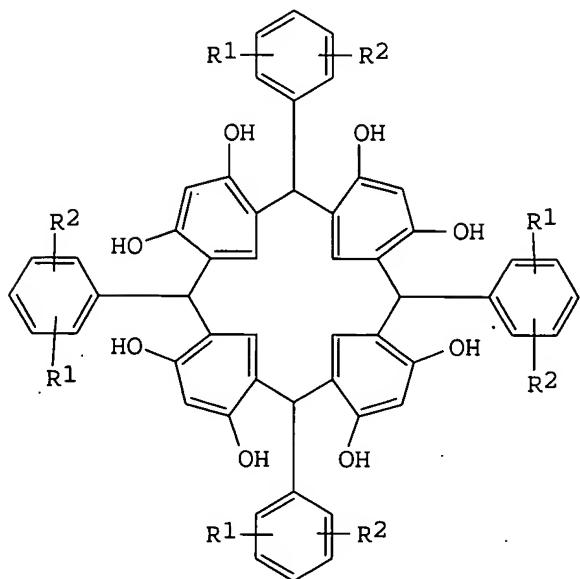
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9206128 | A1 | 19920416 | WO 1991-AU455 | 19911003 <-- |
| W: AU, CA, JP, KR, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE | | | | |
| CA 2093326 | AA | 19920404 | CA 1991-2093326 | 19911003 <-- |
| AU 9186540 | A1 | 19920428 | AU 1991-86540 | 19911003 <-- |
| AU 648350 | B2 | 19940421 | | |
| JP 06501971 | T2 | 19940303 | JP 1991-516194 | 19911003 <-- |
| EP 591200 | A1 | 19940413 | EP 1991-917527 | 19911003 <-- |
| EP 591200 | B1 | 19980506 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 165852 | E | 19980515 | AT 1991-917527 | 19911003 <-- |
| US 5439989 | A | 19950808 | US 1993-30303 | 19930503 <-- |
| PRIORITY APPLN. INFO.: | | | AU 1990-2610 | A 19901003 |
| | | | AU 1990-3871 | A 19901212 |
| | | | WO 1991-AU455 | A 19911003 |

GI For diagram(s), see printed CA Issue.
 AB Title compds. comprise ≥ 1 compound I [$n = 3-10$ integer; R1, R3 = independently H, OH, alkoxy, allyloxy, glycidyloxy; R2 = H, (halo)aralkyl, (halo)alkyl, (halo)aryl; R4 = H, (halo)alkyl, (alkyl)- or (halo)aralkyl, (halo)aryl; R5 = H, aryl, alkyl; and each I contains ≥ 1 epoxy group]. Curable and fiber impregnating compns. are claimed and have high glass temps. and optional tougheners. Thus, a mixture of C-methylcalix[4]resorcinarene, iso-PrOH and MeOH was epoxidized at 50°, treated with methanolic NaOH, mixed with 4,4'-diaminodiphenyl sulfone, Hycar 1300X13 added (15%), the mixture degassed in vacuo, BF3.EtNH2 catalyst added, and the mixture poured into a mold and cured at 100-180° to show glass temperature 285° and fracture toughness 0.68 MPa-m0.5.
 IT 129831-85-2DP, epoxidized
 RL: PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
 (preparation and curing of, for fracture toughness)
 RN 129831-85-2 CAPLUS
 CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),15,17,19(26),21,23-dodecaene-4,6,10,12,16,18,22,24-octol, 2,8,14,20-tetraphenyl- (9CI) (CA INDEX NAME)

L5 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:236060 CAPLUS
 DOCUMENT NUMBER: 112:236060
 TITLE: Flame-proof polycarbonates containing units deriving
 from **halogenated** macrocyclic compounds
 INVENTOR(S): Petri, Alberto
 PATENT ASSIGNEE(S): Enichem Tecnoresine S.p.A., Italy
 SOURCE: Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 350092 | A2 | 19900110 | EP 1989-201660 | 19890623 <-- |
| EP 350092 | A3 | 19910703 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| US 4987269 | A | 19910122 | US 1989-371513 | 19890626 <-- |
| ZA 8904910 | A | 19900328 | ZA 1989-4910 | 19890628 <-- |
| CA 1330095 | A1 | 19940607 | CA 1989-604652 | 19890704 <-- |
| NO 8902797 | A | 19900109 | NO 1989-2797 | 19890706 <-- |
| NO 174812 | B | 19940405 | | |
| NO 174812 | C | 19940713 | | |
| DK 8903370 | A | 19900109 | DK 1989-3370 | 19890707 <-- |
| JP 02067316 | A2 | 19900307 | JP 1989-174345 | 19890707 <-- |
| US 5089595 | A | 19920218 | US 1990-573875 | 19900828 <-- |
| PRIORITY APPLN. INFO.: | | | IT 1988-21284 | A 19880708 |
| | | | US 1989-371513 | A3 19890626 |

GI



AB The title polymers contain the units derived from a bisphenol and a macrocyclic compound (I) ($R_1 = H, OH, Br, Cl$; $R_2 = Cl, Br$). Thus, dissolving bisphenol A 84, I ($R_1 = H$, $R_2 = p\text{-}Cl$, prepared by condensation of resorcinol with *p*-chlorobenzaldehyde) 1.37, NaOH 65.2, and Na₂S₂O₈ 0.02 g

in 650 mL H₂O, adding 6.3 mL 0.5 N aqueous NEt₃ solution and 1.7 g p-tert-butylphenol in 1.3 L CH₂Cl₂, bubbling 44 g COCl₂ over 30 min, and stirring for 2 h gave a polymer having UL 94 test value V-0.

IT 127261-94-3P 127335-23-3P 127335-25-5P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of)

RN 127261-94-3 CAPLUS

CN Pentacyclo[19.3.1.13,7.19,13.115,19]octacosa-1(25),3,5,7(28),9,11,13(27),1
5,17,19(26),21,23-dodecaen-4,6,10,12,16,18,22,24-octol,
2,8,14,20-tetrakis(5-bromo-2-hydroxyphenyl)- (9CI) (CA INDEX NAME)

